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Information Disclosure Statement

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| Application Number | 10/607,434 |
| Filing Date | 06/25/2003 |
| First Inventor | Mark P. Anstadt |
| Examiner Name | |
| Art Unit | |
| Docket Number | MPA-554 |

DATE OF DEPOSIT: 11/3/03

TITLE OF CASE:

Sensor-Equipped And Algorithm-Controlled Direct Mechanical Ventricular Assist Device

The following documents are enclosed:

Certificate of Mailing (1 page)
Statement of Date of IDS (1 page)
IDS (5 pages)
Copy of references cited (924 pages)
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The above named documents are being deposited with the United States Postal Service, using First Class Mail service, on the date indicated above, and is addressed to the Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

The Director is authorized to charge any additional fee(s) as needed during the pendency of this application to deposit account 50-2753.

Howard J. Greenwald P.C.
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(585) 387-0285

Signature of Mailer:

- ☐ Howard J. Greenwald, Esq (Reg. No. 24,247)
☒ John M. Hammond (Reg. No. 52,986)
☐ Peter J. Mikesell (Reg. No. 54,311)
☐ Other _____



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

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| USSN 10/607,434 | DOCKET MPA-554 |
| GROUP NO. | CONFIRMATION NO. |
| FILED 06/25/2003 | EXAMINER |
| TITLE <small>Sensor-Equipped And Algorithm-Controlled Direct Mechanical Ventricular Assist Device</small> | |

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT WITHIN THREE MONTHS OF FILING OR BEFORE MAILING OF FIRST OFFICE ACTION (37 C.F.R. section 1.97(b))

IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING INFORMATION DISCLOSURE STATEMENT

1) The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 C.F.R. section 1.97(b).

or

2) The Information Disclosure Statement submitted herewith contains information that was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement. 37 C.F.R. section 1.97(e)(1).

Date

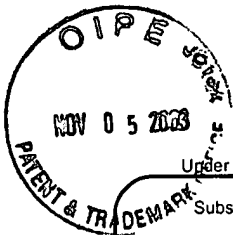
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Sheet 1 of 5

U. S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|-----------------------|--------------------------|--|--------------------------------|--|---|
| | | Number-Kind Code ² (if known) | | | |
| | | US- 6,238,334 | 05-29-2001 | Easterbrook et al. | |
| | | US- 6,206,820 | 03-27-2001 | Kazi et al. | |
| | | US- 5,749,839 | 05-12-1998 | Kovacs | |
| | | US- 5,738,627 | 04-14-1998 | Kovacs et al. | |
| | | US- 5,716,379 | 02-10-1998 | Bourgeois et al. | |
| | | US- 5,713,954 | 02-03-1998 | Rosenberg et al. | |
| | | US- 5,697,952 | 12-16-1997 | Francischelli et al. | |
| | | US- 5,697,884 | 12-16-1997 | Francischelli et al. | |
| | | US- 5,658,237 | 08-19-1997 | Francischelli | |
| | | US- 5,562,595 | 10-08-1996 | Neisz | |
| | | US- 5,558,617 | 09-24-1996 | Heilman et al. | |
| | | US- 5,496,353 | 03-05-1996 | Grandjean et al. | |
| | | US- 5,429,584 | 07-04-1995 | Chiu | |
| | | US- 5,383,840 | 01-24-1995 | Heilman et al. | |
| | | US- 5,364,337 | 11-15-1994 | Guiraudon et al. | |
| | | US- 5,273,518 | 12-28-1993 | Lee et al. | |
| | | US- 5,256,132 | 10-26-1993 | Snyders | |
| | | US- 5,169,381 | 12-08-1992 | Snyders | |
| | | US- 5,131,905 | 07-21-1992 | Grooters | |

FOREIGN PATENT DOCUMENTS

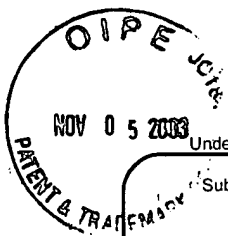
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|-----------------------|--------------------------|--|--------------------------------|--|---|
| | | Number-Kind Code ² (if known) | | | |
| | | US- 5,119,804 | 06-09-1992 | Anstadt | |
| | | US- 5,098,442 | 03-24-1992 | Grandjean | |
| | | US- 5,098,369 | 03-24-1992 | Heilman et al. | |
| | | US- 4,979,936 | 12-25-1990 | Stephenson et al. | |
| | | US- 4,690,134 | 09-01-1987 | Snyders | |
| | | US- 4,621,617 | 11-11-1986 | Sharma | |
| | | US- 4,536,893 | 08-27-1985 | Parravicini | |
| | | US- 4,448,190 | 05-15-1984 | Freeman | |
| | | US- 4,048,990 | 09-20-1977 | Goetz | |
| | | US- 3,674,381 | 07-04-1972 | Schiff | |
| | | US- 3,613,672 | 10-19-1971 | Schiff | |
| | | US- 3,590,815 | 07-06-1971 | Schiff | |
| | | US- 3,587,567 | 06-28-1971 | Schiff | |
| | | US- 3,513,836 | 05-26-1970 | Sausse | |
| | | US- 3,478,737 | 11-18-1969 | Rassman | |
| | | US- 3,455,298 | 07-15-1969 | Anstadt | |
| | | US- 3,376,863 | 04-09-1968 | Kolobow et al. | |
| | | US- 3,371,662 | 03-05-1968 | Heid et al. | |
| | | US- 3,279,464 | 10-18-1966 | Kline | |

FOREIGN PATENT DOCUMENTS

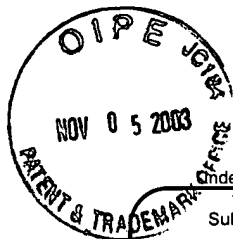
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|-----------------------|--------------------------|--|--------------------------------|--|---|
| | | Number-Kind Code ² (if known) | | | |
| | | US- 3,233,607 | 02-08-1966 | Bolie | |
| | | US- 3,053,249 | 09-11-1962 | Smith | |
| | | US- 3,034,501 | 05-15-1962 | Hewson | |
| | | US- 2,826,193 | 03-11-1958 | Vineberg | |
| | | US- 5,800,334 | 09-01-1998 | Wilk | |
| | | US- 5,971,911 | 10-26-1999 | Wilk | |
| | | US- 6,059,750 | 05-09-2000 | Fogarty et al. | |
| | | US- 6,076,013 | 06-13-2000 | Brennan et al. | |
| | | US- 6,110,098 | 08-29-2000 | Renirie et al. | |
| | | US- 6,251,061 | 06-26-2001 | Hastings et al. | |
| | | US- 6,408,205 | 06-18-2002 | Renirie et al. | |
| | | US- 6,432,039 | 08-13-2002 | Wardle | |
| | | US- 6,464,655 | 10-15-2002 | Shahinpoor | |
| | | US- 6,508,756 | 01-21-2003 | Kung et al. | |
| | | US- 6,626,821 | 09-30-2003 | Kung et al. | |
| | | US- 5,919,209 | 07-06-1999 | Schouten | |
| | | US- 6,044,298 | 03-28-2000 | Salo et al. | |
| | | US- 5,876,345 | 03-02-1999 | Eaton et al. | |
| | | US- 5,089,017 | 02-18-1992 | Young et al. | |

FOREIGN PATENT DOCUMENTS

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|-----------------------|--------------------------|--|--------------------------------|--|---|
| | | Number-Kind Code ² (if known) | | | |
| | | US- 5,330,505 | 07-19-1994 | Cohen | |
| | | US- 6,309,380 | 10-30-2001 | Larson et al. | |
| | | US- 6,183,412 | 02-06-2001 | Benkowski et al. | |
| | | US- 6,132,363 | 10-17-2000 | Freed et al. | |
| | | US- 6,123,726 | 09-26-2000 | Mori et al. | |
| | | US- 5,910,124 | 06-08-1999 | Rubin | |
| | | US- 6,042,532 | 03-28-2000 | Freed et al. | |
| | | US- 5,980,571 | 11-09-1999 | Nomura et al. | |
| | | US- 5,156,154 | 10-20-1992 | Valenta Jr. et al. | |
| | | US- 4,957,477 | 09-18-1990 | Lundback | |
| | | US- 4,662,358 | 05-05-1987 | Farrar et al. | |
| | | US- 4,192,293 | 03-11-1980 | Asrican | |
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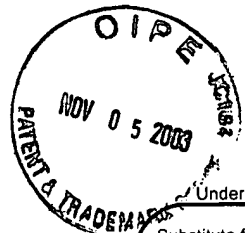
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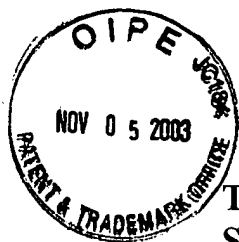
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| | | Author: VICTOR L. POIRIER, Title: The LVAD: A Case Study, Source: Bridge Archives, Published in: The Bridge, Volume 27, Number 4 - Winter 1997, Publication of: National Academy of Engineering of the National Academies, Taken from website: http://www.nae.edu/nae/naehome.nsf/weblinks/NAEW-4NHM83?opendocument | |
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